Lassen Peak and Mount St. Helens Comparison

Similarities

- Both involve a series of explosions which took place over a few months time.
- Both sent at least one major eruption of gas and ash to great heights.
- Both produced an acidic dacite ash.
- Both produced steam deposits of ash which trailed out about 30 miles.
- Both resulted in a display of countless logs which lay in rows pointing away from the explosive hot blast.
- Both were snow covered and mudflows were fed by the snow melt.
- Both released ash into the air where it traveled in quantities for at least 100 miles.
- Both caused reduced visibility for many days.
- Both produced small craters scattered over the area due to stream, ash, or lave chunks. Lassen was the only one with lave chunks, also known as hot rocks.
- Domes produced in vents of both mountains. Mount St. Helens is still temporary as far as a prevention of further eruption is concerned.

Differences

- Mount St. Helens did not have extruded lava
- Lassen produced three craters, Mount St. Helens produced two.
- Lassen has a main lava and mudflow on May 19 prior to the great explosive eruption on May 22.
- Lassen's explosive action was not as wide as the mudflow.
- The width of blow down on Lassen was only 1 ½ mile wide.
- Timber destroyed by flow of explosive blast at Mount St. Helens was 1 billion board feet verses 4.5 million board feet at Lassen.
- Melted snow is considered a major source of mudlflow in Lassen's eruption.
- A cloud rose 5 miles high from Lassen, and 12 miles high above Mount St. Helens.
- Eruptions lasted four years at Lassen, eruptions began in March 1980 at Mount St. Helens and are continuing.
- Mud marks on trees reached 6 ½ feet high at Lassen.

Lassen Peak eruption on June 14, 1914. (NPS/B.F. Loomis)

Mount St. Helens eruption on May 18, 1980. (USGS/Robert Krimmel)